

## Notes on the Praying Mantids (Mantodea) in Korea

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**Abstract** We examined specimens deposited in several institutions in S. Korea. As a result, *Statilia nemoralis* (Saussure) is newly recorded from Korean peninsula, and *Acromantis japonica* Westwood and *Hierodula patellifera* (Serville) are reported in S. Korea for the first time.

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**Key words** Mantodea, *Statilia nemoralis* (Saussure), taxonomy, Korea

### INTRODUCTION

Seven species belonging to six genera of the order Mantodea Burmeister have been reported from Korean peninsula (Okamoto, 1924; Bey-Bienko, 1930; Doi, 1932; Shiraki, 1932; Cho, 1959; Ju, 1969; ESK & KSAE, 1994; Kwon *et al.*, 1996). In this study, *Statilia nemoralis* (Saussure) is newly recorded from Korean peninsula, and *Acromantis japonica* Westwood and *Hierodula patellifera* (Serville) are reported for the first time in S. Korea.

Abbreviations for the depositories and the localities of the specimens used in this study are as follows: NIAST- National Institute of Agricultural Science and Technology, Suwon; SNU- College of Agriculture and Life Science, Seoul National University, Suwon; SSWU- Department of Biology, Sungshin Women's University, Seoul; CIS- Center for Insect Systematics, Kangwon National University, Chuncheon; UIB- Department of Biology, University of Incheon, Incheon; GG- Gyeonggi Prov.; GB- Gyeongbug Prov.; JJ- Jeju Prov.; N. Korea- Democratic People's Republic of Korea; S. Korea- Republic of Korea.

**Family Hymenopodidae Giglio-Tos, 1927** 애기사마귀과 (新稱)

**Genus *Acromantis* Saussure, 1870** 애기사마귀屬

*Acromantis* Saussure, 1870, Mitth. Schweiz. ent. Ges. 3: 226.

***Acromantis japonica* Westwood, 1889** 예기 사마귀

(Figs 1, 4, 5)

*Acromantis japonica* Westwood, 1889, Revis. Mantid. p. 43.*Acromantis japonica*: Shiraki, 1932: 121-122; Furokawa, 1950: 355; Ishihara, 1968: 60, pl. 30, fig. 7a-b; Ju, 1969: 13; Okada, 1989: 27-28; Morimoto, 1989: 44.

**Diagnosis.** Body length ♂ 25-33 mm, ♀ 25-36 mm. Anterior coxae with spines and superior margin of anterior femora not sinuate towards the tip. Ventrolateral spines of anterior tibiae slightly decumbent (Fig. 4). Middle and posterior femora with preapical lobes (Fig. 5).

**Specimens examined.** NIAST: JJ- 1 ♀, Andeogyegog, Daejeong, Namjeju, 4. IX. 1994 (S.M. Lee); 1 ♀, Namweon, Namjeju, 24. IX. 1998 (S.H. Lee).

**Distribution.** Korea, China, and Japan.

**Remarks.** Ju (1969) recorded this species in N. Korea.

**Family Mantidae Burmeister, 1838** 사마귀과**Genus *Hierodula* Burmeister, 1838** 넓적배사마귀屬*Hierodula* Burmeister, 1838, Handb. ent. 2: 536.***Hierodula patellifera* (Serville, 1839)** 넓적배사마귀

(Figs 2, 6, 7, 8)

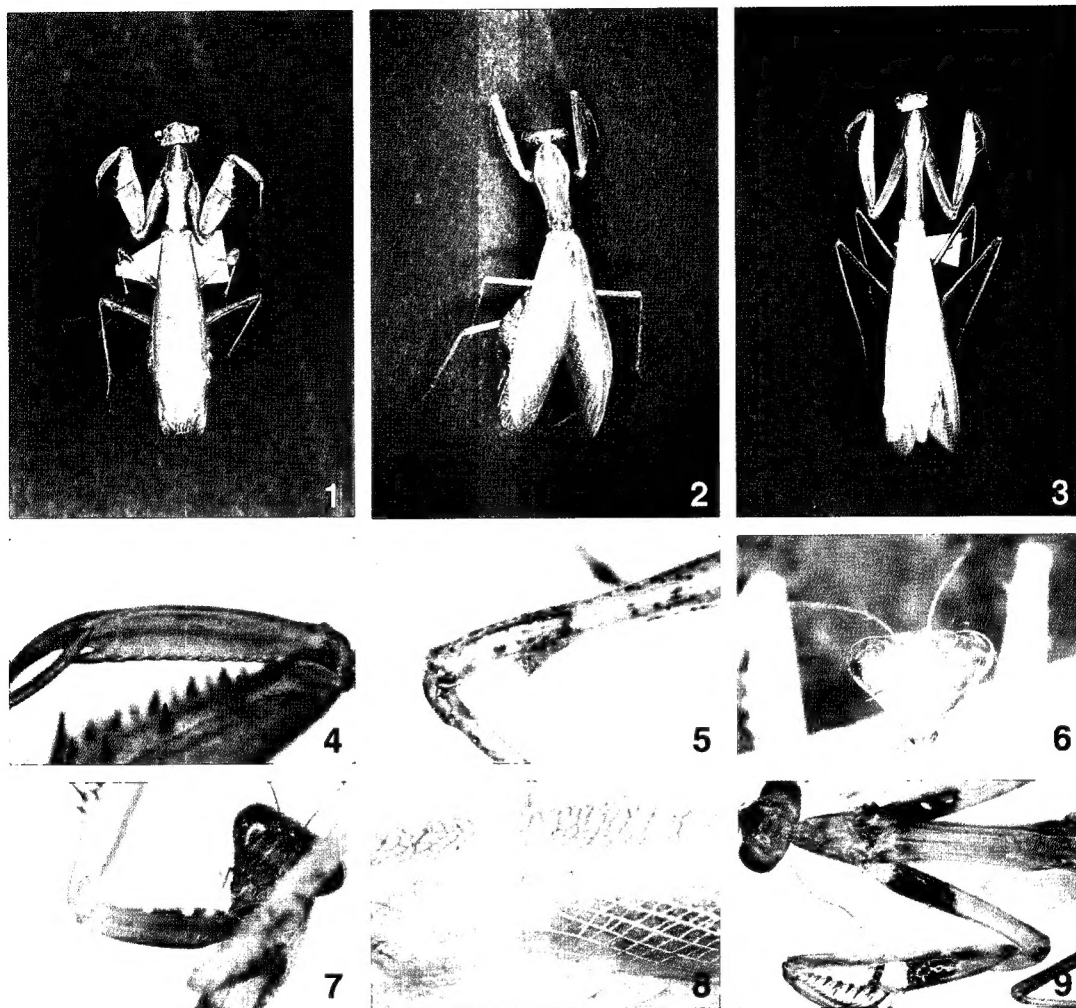
*Mantis patellifera* Serville, 1839, Hist. Ins. Orth. p. 185.*Hierodula patellifera*: Shiraki, 1932: 118; Furokawa, 1950: 355; Ishihara, 1968: 60, pl. 30, fig. 3; Ju, 1969: 13; Okada, 1989: 26-27; Morimoto, 1989: 44.

**Diagnosis.** Body length ♂ 45-65 mm, ♀ 53-71 mm. Frontal sclerite not transverse (Fig. 6). Inferior spines of anterior coxae large, rather tooth-like, and conspicuously dilated toward the base. Anterior coxae with white process (Fig. 7). Anterior margin of fore wings with a white spot (Fig. 8).

**Specimens examined.** NIAST (Department of Sericulture and Entomology): GG- 2 ♀, Suweon, 2. IX. 1999 (T.W. Kim). SNU: GB- 1 ♀, Pohang, 20. IX. 1994 (J.Y. Kim).

**Distribution.** Korea, China, Japan, Taiwan, and Southeast Asia.

**Remarks.** Ju (1969) recorded this species in N. Korea. Park (1993) added the species to South Korean fauna based on two specimens (Peculiar number of specimens: KW-E-O-6) in the collection of CIS. But we recognized that one of these specimens is a male of *Tenodera angustipennis* Saussure and the other is a female of *Mantis religiosa* Linnaeus.



**Figs 1, 4, 5.** *Acromantis japonica* Westwood (4. ventrolateral spines of anterior tibia, 5. preapical lobe of posterior femur).

**Figs 2, 6-8.** *Hierodula patellifera* (Serville) (6. frontal sclerite, 7. white process of anterior coxa, 8. white spot in anterior margin of fore wing).

**Figs 3, 9.** *Statilia nemoralis* (Saussure) (9. prosternum at the base of coxae).

### Genus *Statilia* Stål, 1877 좀사마귀屬

*Statilia* Stål, 1877, Bihang Svenska Akad. 4 (10): 36.

#### ***Statilia nemoralis* (Saussure, 1870) 민무늬좀사마귀 (新稱)**

(Figs 3, 9)

*Pseudomantis nemoralis* Saussure, 1870, Mitth. Schweiz. ent. Ges. 3: 229.

*Statilia nemoralis*: Shiraki, 1932: 120–121; Furokawa, 1950: 354; Ishihara, 1968: 60; Okada, 1989: 25; Morimoto, 1989: 44.

*Diagnosis*. Body length ♂ 40–55 mm, ♀ 46–58 mm. Prosternum without black band at the base of coxae (Fig. 9). Claw-groove in distal part of anterior femora. Middle and posterior femora without apical spine.

*Specimens examined*. NIAST: GG- 1 ♀, Sangpo-ri, Is. Baegryeongdo, 13. IX. 1996 (S.M. Lee). SSWU: GG- 1 ♀, Namhansanseong, Seongnam, 28. IX. 1997 (J.Y. Jang).

*Distribution*. Korea (new record), China, Japan, Taiwan, and Southeast Asia.

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## 韓國產 사마귀목에 關하여

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農業科學技術院, 國立서울大學校 農業生命科學大學, 誠信女子大學校 生物學科, 國立江原大學校 昆蟲分類研究會, 市立仁川大學校 生物學科의 각 標本室에 所藏되어있는 사마귀목 標本들을 調査한 結果 *Statilia nemoralis* (Saussure)를 韓半島에서 처음 記錄하고, *Acromantis japonica* Westwood와 *Hierodula patellifera* (Serville)는 南韓에서 처음으로 記錄하며, 成蟲과 각 部位의 表徵을 圖解하였다.

검색어 : 분류, 사마귀목, 사마귀과, 애기사마귀과, 한국미기록

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